Arthroscopic Repair of Chronic Lateral Ankle Instability

Reference:

Scientific Literature Review

Reviewed by: Rhonda Cornell, DPM
Residency Program: Washington Hospital Center, Washington DC

Podiatric Relevance:
This study provides an interesting view on the use of an arthroscopic method of repair for the lateral ankle ligament complex as compared to the typical gold standard treatment for chronic lateral ankle instability, the Brostrom-Gould procedure.

Methods:
This was a retrospective study looking at 28 patients with chronic ankle instability. The lateral ligament repair was performed with a single suture anchor placed in the fibula arthroscopically. Stability of the ankle joint was confirmed arthroscopically. All arthroscopic procedures included in the study were performed by the same surgeon (NCR). The patients were reviewed after a mean follow up of 24.5 months. The American Orthopedic Foot and Ankle Society (AOFAS) scoring system was utilized to assess the clinical outcomes. Satisfaction was graded on a scale of 1-5 (1 being very unsatisfied and 5 being completely satisfied).

Results:
The average postoperative AOFAS score was 85.3 and the average satisfaction level was 3.8. Complications occurred in nine patients (29%). Complications included 2 patients with a recurrent ankle sprain, 3 patients with wound healing problems of the anterolateral portal, 3 patients with injuries to the superficial peroneal nerve (1 of which is persistent) and one patient had a deep vein thrombosis.

Conclusions:
Most authors recommend both an ankle arthroscopy to assess for osteochondral lesions, as well as an open repair of the ankle ligaments for chronic ankle instability. This study provides a minimally invasive procedure that showed clinical and functional results similar to more aggressive open procedures. Anatomic repair of the ligaments arthroscopically can allow for the repair of concomitant intra-articular lesions during the same procedure. However, this procedure requires arthroscopic skill to avoid common complications and is not ideal for the novice ankle arthroscopist.